

PATENT

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## ABSTRACT OF THE DISCLOSURE

A method for depositing a low dielectric constant film includes providing a gas mixture including a cyclic organosiloxane and  $N_2O$  as an oxidizing gas to a chamber and applying RF power to the gas mixture to deposit a low dielectric constant film. The gas mixture may also include oxygen and/or a linear hydrocarbon. In one aspect, the gas mixture includes  $N_2O$  and oxygen as oxidizing gases, and a ratio of the flow rate of the  $N_2O$  to a total flow rate of the  $N_2O$  and the oxygen is between about 0.1 and about 0.5.

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